



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,429	06/13/2001	Gen Ichimura	6640/61819	5629

7590 02/08/2005

Jay H Maioli
Cooper & Dunham
1185 Avenue of the Americas
New York, NY 10036

EXAMINER

TON, ANTHONY T

ART UNIT	PAPER NUMBER
----------	--------------

2661

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/744,429

Applicant(s)

ICHIMURA ET AL.

Examiner

Anthony T Ton

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 9, 11-14, 18, 19, 21-24, 28 and 29 is/are rejected.
- 7) ☒ Claim(s) 5-7, 10, 15-17, 20, 25-27 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/31/2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____



PHIRIN SAM
PRIMARY EXAMINER

DETAILED ACTION

Drawings

1. The drawings are objected to because the following minor informalities:

The reference "oPCR[n]" in Fig. 8D is not associated with the reference "iPCR" as described in page 27 line 8 of the Applicants' specification.

Examiner suggests changing this reference to "iPCR[n]".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

a) Term "section 303" in page 19 line 21 is not associated with the reference "103" as shown in Fig. 2.

Examiner suggests changing this term to "section 103".

b) Term "section 209" in page 22 line 17 and line 25 (two places) is not associated with the reference "215" as shown in Fig. 3.

Examiner suggests changing this term to "section 215".

c) Term "section 23" in page 22 line 24 is not associated with the reference "215" as shown in Fig. 1.

Examiner suggests changing this term to "section 22".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-4, 11-14 and 21-24** are rejected under 35 U.S.C. 102(b) as being anticipated by *1394 Trade Association* "Audio and Music Data Transmission Protocol", Version 1.0, May 1997, pages 1-23, hereinafter referred to as *Trade Association* (Note: this is a Prior Art submitted by the Applicants).

a) **In Regarding to Claim 1:** *Trade Association* disclosed a transmission method of transmitting data having a predetermined length as a unit between devices for transmitting data

through a predetermined line by a predetermined format (*see Figure of AM824 Data in page 14*), said transmission comprising the steps of:

locating label data indicating a system of transmitted audio stream data at a starting predetermined data length as portion of said data having said a unit (*see a 8-bit Label section shown in Figure of AM824 Data in page 14*); and

locating said audio stream data of said system at an interval behind said label data (*see a 24-bit data section shown in Figure of AM824 Data in page 14*) and transmitting resultant data (*see Transmission Control in page 9*).

b) In Regarding to Claim 2: *Trade Association* further disclosed data accompanying said audio stream data of said system is located at a predetermined interval following said label data and said audio stream data of said system is located at the remaining interval (*see Valid Bit Length Code (VBL) section and 24-bit audio data section as shown in figure of Raw Audio Data in a figure in page 15*).

c) In Regarding to Claim 3: *Trade Association* further disclosed said located audio stream data is one of one-bit system audio stream data and data resulting the stream data from compressing the stream data (*see 24-bit audio data section as shown in the figure of Raw Audio Data in a figure in page 15*).

d) In Regarding to Claim 4: *Trade Association* further disclosed said predetermined format is a format complying with a protocol for transmitting data in an isochronous transfer mode through said transmission line (*see tcode in Isochronous Packet Header format in page 6; when the value of such a tcode = A in Hex, it indicates that this is an isochronous data packet*) and a plurality of data having said predetermined data length as a unit are located at an interval

Art Unit: 2661

following a header prescribed by said protocol (*see a FMT in the CIP header format in page 14; when the value of such a FMT = 10 in Hex, it indicates that the format is for both Audio and Music data*).

e) In Regarding to Claims 11-14: all claimed subject matters of these claims are the same as that of claims 1-4, respectively. Therefore, rejections to the claims 1-4 would be applied to reject these claims in transmission apparatus as taught.

f) In Regarding to Claims 21-24: all claimed subject matters of these claims are the same as that of claims 11-14, respectively. Therefore, rejections to the claims 11-14 would be applied to reject these claims in transmission apparatus at a receiving side as taught.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. **Claims 1-3, 8, 11-13, 18, 21-23, 28 and 29** are rejected under 35 U.S.C. 102(e) as being anticipated by *Hatae et al.* (US Patent No. 6,804,250) hereinafter referred to as *Hatae*.

a) **In Regarding to Claim 1:** *Hatae* disclosed a transmission method of transmitting data having a predetermined length as a unit (*see col.14 lines 25-29: a data packet having one quadlet (four bytes = 32bits) as one unit*) between devices for transmitting data through a predetermined line (*see Fig.2: devices 10, 28 and 60; and 1394 serial bus*) by a predetermined format (*see col.4 line 60 – col.5 line 27: a predetermined format*), said transmission comprising the steps of:

locating label data indicating a system of transmitted audio stream data at a starting predetermined data length as portion of said data having said a unit (*see Fig.5: packet header 521*); and

locating said audio stream data of said system at an interval behind said label data (*see Fig.5: data block 522*) and transmitting resultant data (*see Fig.2: 1394 I/F blocks 14, 44 and 62; and col.3 lines 1-6*).

b) **In Regarding to Claim 2:** *Hatae* further disclosed data accompanying said audio stream data of said system is located at a predetermined interval following said label data and said audio stream data of said system is located at the remaining interval (*see Fig.5: packet header (label data) followed by header information 523 (accompanied data) and data 524 (audio stream data), respectively*).

c) **In Regarding to Claim 3:** *Hatae* further disclosed said located audio stream data is one of one-bit system audio stream data and data resulting the stream data from compressing the stream data (*see col.4 line 60 – col.5 line 27: a compression/expansion unit 36*).

d) **In Regarding to Claim 8:** all claimed subject matters of this claim are the same as that of claim 1, except for audio stream data is compressed by a compression system.

However, *Hatae* also explicitly disclosed such a compression system (*see col.4 line 60 – col.5 line 27: a compression/expansion unit 36*).

e) **In Regarding to Claims 11-13 and 18:** all claimed subject matters of these claims are the same as that of claims 1-3 and 8, respectively. Therefore, rejections to the claims 1-3 and 8 would be applied to reject these claims in transmission apparatus as taught.

f) **In Regarding to Claims 21-23:** all claimed subject matters of these claims are the same as that of claims 11-13, respectively. Therefore, rejections to the claims 11-13 would be applied to reject these claims in transmission apparatus at a receiving side as taught.

g) **In Regarding to Claim 28:** *Hatae* disclosed a transmission apparatus comprising:
receiving means for receiving data transmitted through a predetermined transmission line (*see Fig.2: block 44*);

identification means for setting the data received by said receiving means to data having a predetermined data length as a unit, and for identifying label data located at a starting portion of each unit and sub-label data located following said label data (*see Fig.2: blocks 42 and 50; and Fig.5*); and

audio data processing means for judging a compression based on identified results of said system of audio stream data sub-label data by said identification means, and for executing audio data processing based on the judged compression system (*see Fig.2: blocks 36, 56 and 50*).

h) **In Regarding to Claim 29:** *Hatae* disclosed a transmission system for transmitting

Art Unit: 2661

data having a predetermined data length as a unit between a first device and a second device through a predetermined transmission line using a predetermined format (*see Figs. 2 and 5*), said transmission system comprising:

audio data input means for obtaining audio stream data a predetermined system (*see Fig.2: block 30*);

transmission data generating means for dividing said data obtained by said audio data input means into data having a predetermined data length (*see Fig.2: blocks 32, 34 and 36*), and for obtaining transmission data of a predetermined format by locating label data indicating a system of transmitted data at a starting portion of each divided data (*see Fig.5*); and

transmission means for transmitting transmission data generated by said transmission data generating means to said transmission line from said first device (*see Fig.2: block 44*); and receiving means for receiving data transmitted through said transmission line (*see Fig.2: block 14*);

identification means for setting the data received by data length said receiving means to data having as a unit, and for identifying a predetermined label data located at a starting portion of said unit (*see Fig.2: blocks 12 and 16*); and

audio data processing means for identifying a system of audio stream data located at an interval following said label data based on identified results of said identification means (*see Fig.2: block 18*), and for executing audio data processing based on the judged system by said second device (*see Fig.2: blocks 10, 12, 16 and 20*).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 8, 9, 18 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over *1394 Trade Association* "Audio and Music Data Transmission Protocol", Version 1.0, May 1997, pages 1-23, in view of *Hatae et al.* (US Patent No. 6,804,250).

a) **In Regarding to Claim 8:** *Trade Association* disclosed all claimed subject matters of this claim as that in the claim 1.

Trade Association failed to explicitly disclose audio stream data is compressed by a compression system.

Hatae explicitly disclosed such a compression system (*see col.4 line 60 – col.5 line 27: a compression/expansion unit 36*).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to implement such a compression system, as taught by *Hatae* with *Trade Association*, so that audio stream data can be compressed and expended by a compression device. The motivation for doing so would have been to save storage for a memory or a data packet. Therefore, it would have been obvious to combine *Hatae* with *Trade Association* in the invention as specified in the claim.

b) **In Regarding to Claim 9:** *Trade Association* further disclosed said predetermined format is a format complying with a protocol for transmitting data in an isochronous transfer mode through said transmission line (*see tcode in Isochronous Packet Header format in page 6*;

Art Unit: 2661

when the value of such a tcode = A in Hex, it indicates that this is an isochronous data packet)
and a plurality of data having said predetermined data length as a unit are located at an interval following a header prescribed by said protocol (*see a FMT in the CIP header format in page 14; when the value of such a FMT = 10 in Hex, it indicates that the format is for both Audio and Music data*).

c) **In Regarding to Claims 18 and 19:** all claimed subject matters of these claims are the same as that of claims 8 and 9, respectively. Therefore, rejections to the claims 8 and 9 would be applied to reject these claims in transmission apparatus as taught.

Allowable Subject Matter

10. **Claims 5-7, 10, 15-17, 20, 25-27 and 30** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Examiner Information


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Anthony T Ton** whose telephone number is 571-272-3076. The examiner can normally be reached on M-F: 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

by: 
Anthony T. Ton
Patent Examiner
February 2, 2005


PHIRIN SAM
PRIMARY EXAMINER